



Microgram

Bulletin

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- FEBRUARY 2011 -

SELECTED REFERENCES

[The Selected References section is a compilation of recent publications of presumed interest to forensic chemists. Unless otherwise stated, all listed citations are published in English. Abbreviated mailing address information duplicates that which is provided by the abstracting service. Patents and Proceedings are reported only by their *Chemical Abstracts* citation number.]

1. Debrus B, Broseus J, Guillarme D, Lebrun P, Hubert P, Veuthey JL, Esseiva P, Rudaz S. **Innovative methodology to transfer conventional GC-MS heroin profiling to UHPLC-MS/MS.** *Analytical and Bioanalytical Chemistry* **2010**, No pp. yet given. [Editor's Notes: Presents title study. Contact: Laboratory of Analytical Chemistry, Department of Pharmacy, CIRM, University of Liege, Liege 4000, Belgium.]
2. Tadjimukhamedov FK, Jackson AU, Nazarov EG, Ouyang Z, Cooks RG. **Evaluation of a Differential Mobility Spectrometer/Miniature Mass Spectrometer System.** *Journal of the American Society for Mass Spectrometry* **2010**;21(9):1477-1481. [Editor's Notes: A planar differential mobility spectrometer (DMS) was coupled to a Mini 10 hand-held rectilinear ion trap (RIT) mass spectrometer (MS) (total wt. 10 kg), and the performance of the instrument was evaluated using illicit drug analysis. Online ion mobility filtering showed to be advantageous in reducing the background chemical noise in the analysis of the psychotropic drug diazepam. The additional separation power of DMS facilitated the identification of 2 drugs of similar molecular weight,

morphine (MW = 285.34), and diazepam (MW = 284.70), using a miniature mass spectrometer capable of unit resolution. The similarity in the proton affinities of these 2 compounds resulted in some cross-interference in the MS data due to facile ionization of the neutral form of the compounds even when the ionic form had been separated by DMS. Contact: Department of Chemistry, Purdue University, West Lafayette, IN 49707-1393, USA.]

Additional References of Possible Interest:

1. Idris AM. **Flow Injection, Overlooked Techniques in Forensic Analysis.** Critical Reviews in Analytical Chemistry 2010;40(4):218-225. [Editor's Notes: The objective of the article is to draw attention to the potential of Flow Injection (FI) techniques to forensic analytical chemists. The article provides a comprehensive review of the applications of FI techniques to forensic chemical analysis, which covers the literature since the inception of the techniques. The article also offers a brief historical background on the developments of the generation and versions of the techniques while highlighting their advantages. In addition, perspectives on the applications of FI techniques to forensic analysis are discussed. Contact: Department of Chemistry, College of Science, King Faisal University, Hofuf, Saudi Arabia.]
2. Neng NR, Silva ARM, Nogueira JMF. **Adsorptive Micro-extraction Techniques - Novel Analytical Tools for Trace Levels of Polar Solutes in Aqueous Media.** Journal of Chromatography, A 2010;1217(47):7303-7310. [Editor's Notes: Presents title study. Contact: University of Lisbon, Faculty of Sciences, Chemistry and Biochemistry Department, Campo Grande, Center of Chemistry and Biochemistry, Ed. C8, Lisbon 1749-016, Portugal.]

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Journal of Chromatography A (Microfilm) 1993; Vol. 652 to 2001; Vol. 921
Journal of Chromatography B (Microfilm) 1994; Vol. 652 to 2004; Vol. 813
Journal of Forensic Sciences (Microfilm) 1956; Vol. 1 to 1977; Vol. 22
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Journal of Pharmacy and Pharmacology (Microfilm) 1965; Vol. 17 to 1987; Vol. 39
Science (Microfilm) 1998; Vol. 279 to 2004; Vol. 306

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THE DEA FY 2011 STATE AND LOCAL FORENSIC CHEMISTS SEMINAR SCHEDULE

The FY 2011 schedule for the State and Local Forensic Chemists Seminar is as follows:

June 6-10, 2011
September 12-16, 2011

The school is open only to forensic chemists working for law enforcement agencies. It is intended for chemists who have completed their agency's internal training program and have also been working on the bench for at least one year. There is no tuition charge. The course is held at the Hyatt Place Dulles North Hotel in Sterling, Virginia (near the Washington/Dulles International Airport). A copy of the application form is reproduced on the last page of this issue of *Microgram Bulletin*. Completed applications should be mailed to the Special Testing and Research Laboratory (Attention: J. Head) at 22624 Dulles Summit Court, Dulles, VA 20166. For additional information, call (703) 668-3349.

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SCIENTIFIC MEETINGS

Title: 2011 Mid-Atlantic Association of Forensic Scientists Annual Meeting
Sponsoring Organization: Mid-Atlantic Association of Forensic Scientists
Inclusive Dates: May 23-27, 2011
Location: Founder's Inn and Spa (Virginia Beach, VA)
Contact Information: maafsmtg@gmail.com
Website: www.maafs.org

DEA State and Local Forensic Chemist Seminar Application			
Name: (PRINT NAME EXACTLY AS IT IS TO APPEAR ON CERTIFICATE)		Title:	
Employer:			
Your Office Mailing Address (include city, state, and zipcode):			Length of Service:
Business Telephone: () -	Business Fax: () -	Date of Application:	
Email Address:			
Education			
College or University	Degree	Major	
Please Check Which Techniques or Equipment Are Used in Your Laboratory			
<input type="checkbox"/>	Color Tests	<input type="checkbox"/>	UV
<input type="checkbox"/>	Column Chromatography	<input type="checkbox"/>	IR
<input type="checkbox"/>	Microcrystal Tests	<input type="checkbox"/>	CE
<input type="checkbox"/>	Thin Layer Chromatography	<input type="checkbox"/>	GC/MS
<input type="checkbox"/>	GC	<input type="checkbox"/>	Other (please specify)
<input type="checkbox"/>	HPLC	<input type="checkbox"/>	Other (please specify)
Indicate Analytical Problem(s) Nominee Would Like to Have Covered:			
Choice of Seminar Dates:			
1st Choice:		2nd Choice:	
Laboratory Chief/Director:			
Printed Name: _____		Signature: _____	
Title: _____		Date: _____	
Phone: _____			